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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,560	10/31/2003	Thomas Grafenauer	03100132US	8411

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EXAMINER

FERGUSON, LAWRENCE D

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/697,560	Applicant(s) GRAFENAUER, THOMAS	
	Examiner Lawrence D. Ferguson	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-22 is/are pending in the application.
- 4a) Of the above claim(s) 11-15 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 16-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed May 24, 2006.

Claims 1, 3-5, 7 and 8 were amended and claims 16-22 were added rendering claims 1-9 and 11-22 pending, with claims 11-15 and 22 withdrawn as a non-elected invention.

New Matter - 35 U.S.C. 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 16-22 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 16, the phrase, 'wherein the density of the support board continuously decreases from the top side to a substantial midpoint of the support board, and continuously decreases from the underside of the substantial midpoint' is not supported by the specification. In claim 20, the phrase, "density distribution through a thickness of the support board is substantially parabolic in shape" is not supported by the specification. The Examiner was not able to find support for the added limitation discussed above at the cited portions of the specification.

Restriction

4. Newly submitted claim 22 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: A process for producing a panel is a different invention than a panel.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 22 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim 22 link(s) inventions I and II. The restriction requirement of the linked inventions is subject to the nonallowance of the linking claim(s), claim 22. Upon the indication of allowability of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise requiring all the limitations of the allowable linking claim(s) will be rejoined and fully examined for patentability in accordance with 37 CFR 1.104. Claims that require all the limitations of an allowable linking claim will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

Applicant(s) are advised that if any claim(s) including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction

requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. In re Ziegler, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Claim Rejections – 35 USC § 103(a)

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luck et al. (U.S. 4,283,450).

Luck discloses a panel having a core and high density skins having a density of about 40-55 lbs/ft³ (column 1, lines 11-21) having a dense skin layers (termination layers) on the exterior surfaces of the core layer (column 3, lines 35-45 and column 4, lines 13-15) where it would have been obvious to one of ordinary skill in the art for the density of the top skin to be capable of being lower than the density of the lower skin layer. The skin layers are comprised of resin binders and urea formaldehyde (column 9, lines 44-52). Luck does not explicitly shows that the panel has a density, gluing factor or density distribution as claimed. However, such features are properties which can be easily determined by one of ordinary skill in the art. With regard to the limitations of the density, gluing factor or density distribution, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. density, gluing factor or density distribution) fails to render claims

patentable in the absence of unexpected results. All of the aforementioned limitations are optimizable as they directly affect the durability of the panel. It would have been obvious to one of ordinary skill in the art to make the panel with the limitations of the density, gluing factor or density distribution since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 USPQ 215 (CCPA 1980).

Claim Rejections – 35 USC § 103(a)

7. Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luck et al. (U.S. 4,283,450) in view of Thompson et al (U.S. 6,352,661).

Luck is relied on for claim 1 as above. Luck does not explicitly disclose the binder comprising isocyanate. Thompson teaches a panel comprising an isocyanate binder (column 12, lines 23-44). Therefore, it would have been obvious to one of ordinary skill in the art to have employed the isocyanate, as taught in Thompson, in the binder of Luck because Thompson teaches isocyanate binder are conventional in the art within panel structures.

Response to Arguments

8. Applicant's remarks to the rejection made under 35 USC 103(a) as being unpatentable over Luck et al. (U.S. 4,283,450) in view of Chen et al (U.S. 6,617,009) have been considered and Chen is withdrawn due to it lacking termination layers. Applicant argues Luck does not disclose termination layers on the top and bottom of the board. Luck discloses a panel having a core and high density skins having a density of about 40-55 lbs/ft³ (column 1, lines 11-21)

Art Unit: 1774

having a dense skin layers (termination layers) on the exterior surfaces of the core layer (column 3, lines 35-45 and column 4, lines 13-15). Applicant further argues the references do not teach or suggest the support board having a density, gluing factor or density distribution as claimed.

Examiner maintains such features are properties which can be easily determined by one of ordinary skill in the art. With regard to the limitations of the density, gluing factor or density distribution, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The aforementioned limitations are optimizable as they directly affect the durability of the panel. It would have been obvious to one of ordinary skill in the art to make the panel with the limitations of the density, gluing factor or density distribution since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 USPQ 215 (CCPA 1980).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1774

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



L. Ferguson
Patent Examiner
AU 1774



RENA DYE
SUPERVISORY PATENT EXAMINER

A.U. 1774 8/2/04